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ABSTRACT

The principal objectives of the College Bound Summer Program, funded under the Elementary Secondary Education Act Title I, were to improve student's reading and mathematics, increase their ability to do college work, and make the students' transition from junior high to high school easier. Program participants were selected on the basis of either performance on the Stanford Achievement test or recommendations from junior high school counselors. During each day of the program, students participated in three classes: remedial reading, corrective mathematics, and a reading or mathematics workshop. An ESL program with the same goals, and using the audiolingual approach, was a part of the program. For ESL classes all materials were in English and Spanish, and bilingual educational assistants were employed. It was found that the program produced significant gains in reading and mathematics for all groups of participants. (Author/JM)

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EVALUATION REPORT

B/E 09-61622

COLLEGE BOUND PROGRAM

Summer 1975

Final Evaluation Report for the
Period From July 1 to August 11, 1975.

Submitted by Gerald W. Woloshin

An evaluation of a New York City School district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the period from July 1 to August 11, 1975.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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COLLEGE BOUND PROGRAM

Summer 1975

Chapter I: THE PROGRAM

The College Round Summer Program was conducted for six weeks from July 1 through August 11, 1975. Classes were held five days a week for three hours in the morning at the following New York City High Schools: Bushwick, Charles Evans Hughes Annex, John Jay, Morris, Walton, and George Washington Annex. Facilities were established to accommodate 1,150 9th and 250 10th grade students.

As its principal objectives, the program sought to overcome students' academic weaknesses in reading and mathematics, increase their potential for doing college work successfully, and facilitate students' transition from junior high to high school. Students were selected for participation in the program based on scores falling below grade level on the Stanford Achievement Test administered to students in junior high and non-public schools in the Spring of 1975. Linguistically isolated students were chosen on the basis of recommendations of their junior high school counselors.

During each day of the program, students participated in three one-hour classes, one each devoted to remedial or corrective reading, corrective mathematics, and a reading or mathematics workshop. Reading classes were structured to enhance the development of such skills as: vocabulary building, interpreting words in context, getting the main thought,

finding and relating details, determining sequence, drawing inferences, and basic information gathering skills. Also, reading classes were equipped with a variety of general reading material, such as contemporary and classic novels and biographies.

In corrective mathematics classes, an effort was made to develop and reinforce basic mathematical skills, including factoring, understanding and solving equations, relating fractions to decimals and percentages, and perceiving relationships between fractions and whole numbers. Attention was focused on the students' ability to read exponents, formulas, subscripts, equations, and reference tables.

A heavy emphasis was placed on the use of diagnostics to determine students' strengths and weaknesses in reading and mathematics. Individual reading and mathematics sub-test scores on the California Achievement Tests and the SRA criterion referenced test were used by teachers to earmark deficiencies and, through a program of individualized instruction, concentrate on strengthening these academic weaknesses. In fact, individualized instruction was the principal teaching method in the summer program.

The reading and mathematics workshops consisted of activities selected with the purpose of developing and reinforcing reading and mathematical skills. Among these activities were the preparation of a class newspaper, solving mathematical puzzles and playing mathematical games, using calculators, learning about poetry, and engaging in dramatic activities.

An ESL program, with the same goals and using the audio-lingual approach, was a part of the College Bound Summer Program. Besides instruction, all materials were in both English and Spanish, and bilingual educational assistants were employed for ESL classes.

Chapter II: EVALUATIVE PROCEDURES

Evaluation Objective #1: To determine whether, as a result of participation in the Remedial Reading Program, the reading grade of the students showed a statistically significant difference between pretest score and posttest score in the positive direction.

1.1 Subjects: All participants in the program.

1.2 Method and Procedures: The appropriate level of the California Reading Achievement Test was administered during the first week and again during the last week of the program.

1.3 Analysis of Data: Data were analyzed through the use of a t test for correlated data. Pre-posttest differences between raw score means were tested for statistical significance at the minimum .05 level. Separate analyses were performed for 9th grade, 10th grade, and ESL students.

1.4 Time Schedule: Pretest was administered during the first week and posttest during the last week of the program.

Evaluation Objective #2: To determine whether, as a result of participation in the Remedial Mathematics Skills Program, the mathematics grade of the students showed a statistically significant

difference between pretest score and posttest score in the positive direction.

2.1 Subjects: All participants in the program.

2.2 Method and Procedures: The appropriate level of the California Mathematics Achievement Test was administered during the first week and again during the last week of the program.

2.3 Analysis of Data: Data were analyzed through the use of a t test for correlated data. Pre-posttest differences between raw score means were tested for statistical significance at the minimum .05 level. Separate analyses were performed for 9th grade, 10th grade, and ESL students.

2.4 Time Schedule: Pretest was administered during the first week and posttest during the last week of the program.

Evaluation Objective #3: To determine if, as a result of participation in the program, 70 percent of the participants demonstrated mastery of at least one instructional objective, in reading and mathematics, which prior to participation in the program, they did not master.

3.1 Subjects: All participants in the program at Walton High School.

3.2 Methods and Procedures: All participants in the program were administered a criterion referenced test developed by SRA on a pre-posttest basis. For each instructional objective, data were compiled on the number of participants passing and failing on both the pretest and the posttest.

3.3 Data Analysis: Data were analyzed and presented in tabular

form showing the percentage of participants demonstrating mastery or non-mastery of each instructional objective (according to the SED classification system) at initial and final testing. Data were analyzed separately for 9th and 10th grade students, and separately for reading and mathematics.

3.4 Time Schedule: Initial testing took place during the first week of the program. Final testing took place during the last week of the program.

3.5 Instructional Objectives: Table 1 presents a listing of the instructional objectives and the SED indices and SRA codes representing these objectives.

Evaluation Objective #4: To determine, as a result of participation in the program, the extent to which students demonstrated mastery of instructional objectives.

4.1 Subjects: All participants in the program at Walton High School.

4.2 Methods and Procedures: All participants in the program were administered a criterion referenced test developed by SRA on a pre-posttest basis. Program personnel recorded pre-posttest results in the pass/fail mode by student and instructional objective on the Class Evaluation Record. A summary of these data was prepared.

4.3 Data Analysis: Data were analyzed and presented in tabular and narrative form in order to show each of the following:

a. The distribution of students failing to demonstrate mastery prior to instruction and not receiving sufficient instruction to receive a posttest.

TABLE 1

Instructional Objectives in Reading and Mathematics With Accompanying SED Index and SRA Code

Instructional Objective	SED Index	SRA Code
Reading		
Word Attack	2-2-5	WA-17
Vocabulary	2-2-1, 3	V-7, V-17
Comprehension of Words and Sentences	2-2-6, 7 2-3-5	C-6, 8, 21
Comprehension	2-4-4, 6, 9 2-4-3 2-4-8	C-22, 24, 25 C-27, 29, 78, 87 C-88
Study Skills	2-5-2	SS-34
Mathematics		
Decimals	1-1-4	F-41
Addition	1-1-7	W-31, F-27 F-29
Subtraction	1-1-8	W-37, F-33
Multiplication	1-1-9	W-44, F-37 F-46
Division	1-1-10	W-55, F-39 F-48
Properties of Operations and Relations	1-1-11	F-50, F-55
Percent	1-1-16	F-75

b. The distribution of students demonstrating mastery of objectives prior to instruction.

c. The distribution of student mastery as a result of instruction by instructional objectives.

d. The distribution of the number of objectives mastered as a result of instruction.

e. The distribution of the percentage of students achieving various levels of mastery of instructional objectives.

Data were analyzed separately for 9th and 10th grade students, and separately for reading and mathematics.

4.4 Time Schedule: The pretest was administered during the first week of the program. The posttest was administered during the last week of the program.

Evaluation Objective #5: To determine the extent to which the program, as actually carried out, coincided with the program as described in the project proposal.

5.1 Subjects: All participants in the program.

5.2 Methods and Procedures: Operation of the program was observed by way of site visits. Personnel and participants were interviewed also.

5.3 Data Analysis: Information was analyzed to determine the extent of conformity between proposal and program. Significant discrepancies were described.

5.4 Time Schedule: Information was gathered throughout the duration of the program.

Note: It should be noted that not all participants in the program were represented in the data analysis. Posttesting was not done

for a relatively small percentage of participants (4%) because of some justifiable reason, such as having to enter the hospital, being out of the city during testing, or discontinuing the program.

Chapter III: FINDINGS

Evaluation Objective #1: To determine whether, as a result of participation in the Remedial Reading Program, the reading grade of the students showed a statistically significant difference between pretest score and posttest score in the positive direction.

An examination of Table 2 reveals that each group tested for reading, 9th grade, 10th grade, and bilingual students, showed a highly statistically significant difference between pretest and posttest mean reading achievement score in the positive direction.

Evaluation Objective #2: To determine whether, as a result of participation in the Remedial Mathematics Skills Program, the mathematics grade of the students showed a statistically significant difference between pretest score and posttest score in the positive direction.

Results presented in Table 2 show that each group tested in mathematics, 9th grade, 10th grade, and bilingual students, demonstrated a highly statistically significant difference between pretest and posttest mean mathematics achievement score in the positive direction.

Evaluation Objective #3: To determine if, as a result of participation in the program, 70 percent of the participants demonstrated mastery of at least one instructional objective in reading and mathematics, which prior to participation in the program, they did not master.

TABLE 2

Results of Correlated t Tests Between Pretest and Posttest Scores of Program Participants

	N	Pretest Mean	Posttest Mean	t	Significance
9th Grade Reading	684	40.89	46.85	22.75	$p < .001$
9th Grade Math	696	23.04	29.67	26.76	$p < .001$
10th Grade Reading	208	44.87	50.06	9.67	$p < .001$
10th Grade Math	205	26.94	33.45	14.69	$p < .001$
Bilingual Reading (All 9th Grade)	76	28.71	34.19	7.93	$p < .001$
Bilingual Math (All 9th Grade)	81	20.56	27.64	11.06	$p < .001$

Results presented in Table 3 indicate that 70 percent of both the 9th grade and 10th grade students demonstrated mastery of at least one instructional objective, in reading and mathematics, that they had failed to master before exposure to instruction.

Evaluation Objective #4: To determine, as a result of participation in the program, the extent to which students demonstrated mastery of instructional objectives.

Table 4 presents the distribution of students failing to demonstrate mastery of objectives prior to instruction and not receiving sufficient instruction to receive the posttest. Overall, the small number of 9th grade students in this category (no 10th grade students) failed most of the instructional objectives.

Table 5 presents the distribution of students demonstrating mastery of objectives prior to instruction. Examination of this table reveals that most students failed more instructional objectives than passed them prior to instruction.

Table 6a presents the distribution of student mastery in reading as a result of instruction by instructional objectives. Table 6b presents the distribution of student mastery in mathematics as a result of instruction by instructional objectives. Examination of Tables 6a and 6b reveals the instructional objectives that were the most and least difficult to master. It is interesting that the 9th and 10th grade students showed similar patterns of difficulty in mastering the instructional objectives attempted.

Table 7 presents the distribution of the number of objectives mastered as a result of instruction. Comparison of the results presented in Table 7 (posttest) with those presented in Table 5

TABLE 3

Distribution of Student Mastery After Instruction of Instructional Objectives Failed Prior to Instruction

No. Instructional Objectives Passed	9th Grade Reading		9th Grade Math		10th Grade Reading		10th Grade Math	
	N	%	N	%	N	%	N	%
15								
14								
13			1	1				
12			0	0				
11			0	0				
10			4	3			1	4
9			7	6			3	12
8	1	1	12	10			1	4
7	2	2	8	7			3	12
6	1	1	18	15	1	4	4	16
5	7	6	8	7	3	11	6	24
4	19	16	16	13	3	11	5	20
3	21	17	16	13	6	24	0	0
2	23	19	17	14	1	4	2	8
1	27	22	10	8	9	35	0	0
0	20	16	3	3	3	11	0	0

TABLE 4

Distribution of Student Non-Mastery on Pretest and No Posttest Follow-up

No. Instructional Objectives Failed	9th Grade Reading		9th Grade Math	
	N	%	N	%
14-15	1	20	3	43
12-13	3	60	4	57
10-11	1	20		

TABLE 5

Distribution of Student Mastery of Instructional Objectives Prior to Instruction

No. Instructional Objectives Mastered	9th Grade Reading		9th Grade Math		10th Grade Reading		10th Grade Math	
	N	%	N	%	N	%	N	%
14-15								
12-13	1	1	2	2				
10-11	3	2	9	7			4	16
8-9	10	8	7	6	7	27	1	4
6-7	31	26	14	12	8	31	6	24
4-5	42	35	41	34	8	31	10	40
2-3	25	21	31	26	2	7	2	8
0-1	9	7	16	13	1	4	2	8

TABLE 6a

Distribution of Student Mastery in Reading by Instructional Objective As a Result of Instruction*

Instructional Objective Mastered: Reading (SRA Code)	9th Grade N	9th Grade %	10th Grade N	10th Grade %
WA-7 (Word Attack)	48	40	9	35
V-7 (Vocabulary)	41	34	6	23
V-17 "	60	50	17	65
C-6 (Comprehension)	111	92	23	88
C-8 "	112	93	25	96
C-21 "	95	79	20	77
C-22 "	39	32	12	46
C-24 "	53	44	14	54
C-25 "	60	50	17	65
C-27 "	19	16	6	23
C-29 "	51	42	17	65
C-78 "	25	21	5	19
C-87 "	62	51	19	73
C-88 "	11	9	2	8
SS-34 (Study Skills)	70	58	22	85

* Same number of students attempted mastery of each objective; N = 121 for 9th grade, N = 26 for 10th grade; percentages were computed from these values.

TABLE 6b

Distribution of Student Mastery in Mathematics by Instructional Objective As a Result of Instruction*

Instructional Objective Mastered: Mathematics (SRA Code)	9th Grade N	9th Grade %	10th Grade N	10th Grade %
W-31 (Addition)	117	98	25	100
W-37 (Subtraction)	108	90	25	100
W-44 (Multiplication)	110	92	25	100
W-55 (Division)	80	67	19	76
F-27 (Addition)	90	75	23	92
F-29 "	86	72	24	96
F-33 (Subtraction)	78	65	17	68
F-37 (Multiplication)	69	58	20	80
F-39 (Division)	75	62	21	84
F-41 (Decimals)	90	75	21	84
F-46 (Multiplication)	58	48	13	52
F-48 (Division)	46	38	16	64
F-50 (Properties of Operations and Relations)	53	44	16	64
F-55 "	26	22	8	32
F-75 (Percent)	13	11	4	16

* Same number of students attempted mastery of each objective: N = 120 for 9th grade, N = 25 for 10th grade: percentages were computed from these values.

TABLE 7

Distribution of the Number of Instructional Objectives Mastered After Instruction

No. Instructional Objectives Mastered	9th Grade Reading		9th Grade Math		10th Grade Reading		10th Grade Math	
	N	%	N	%	N	%	N	%
14-15	1	1	20	17			4	16
12-13	7	6	21	17	3	11	10	40
10-11	18	15	24	20	6	23	5	20
8-9	30	25	13	11	9	35	3	12
6-7	25	20	16	13	5	19	2	8
4-5	24	20	10	8	1	4	1	4
2-3	12	10	14	12	1	4	0	0
0-1	4	3	2	2	1	4	0	0

(pretest) shows a strong shift toward achieving greater mastery of the instructional objectives in reading and mathematics for both the 9th and 10th grade students.

Evaluation Objective #5: To determine the extent to which the program, as actually carried out, coincided with the program as described in the project proposal.

Data pertaining to this objective were obtained through site visits to each high school, at which, classroom instruction and activities were observed, and teachers-in-charge, teachers, guidance counselors, educational assistants, and students were interviewed. The following narrative, besides bearing on discrepancies between the proposed and the actual program and the adequacy of the facilities and materials, includes observations and commentary concerning the program.

Without doubt the strongest component of the program was the individualization of instruction. Almost all teachers employed this method as their principal teaching technique. It is believed that the significant gains evidenced by the students in the program were in a large part attributable to the use of this method. Individualized instruction is especially effective with students needing remediation. It relies heavily on the technique of diagnosing weaknesses and applying extra effort to strengthen these weaknesses. Individualized instruction allows close contact between teacher and student, which may satisfy emotional needs of students. Moreover, it prevents a student from mentally tuning out a teacher or from "hiding" during a traditional class lecture and discussion. From observation of classroom behavior, it appeared that students were not discouraged by long sessions of

working by themselves.

The teachers almost universally appeared to be effective and dedicated to helping students improve skills. Most of them were veterans of the College Bound Program. They showed a genuine concern for students and their academic progress, and they interacted well with students—a task made easier by the highly motivated, self-disciplined students.

As far as the educational assistants were concerned, most teachers were happy with their above-average quality. Several educational assistants were teachers themselves. They appeared to be effective teaching assistants, and they interacted well with students. Educational assistants were especially important and useful for individualized instruction. Some of them were actually College Bound graduates.

The guidance counselors appeared to be doing a competent job. They had regular contact with students and parents. They gave prompt attention to problems, such as excessive absence. What is especially commendable about the College Bound counseling component is the extra effort in getting parents involved in students' behavior and academic progress. Overall, the guidance counselors commented favorably on the job done by the family assistants in their role as liaison between home and school. A frequent complaint by counselors centered on information on students from feeder schools. This information was, in many cases, insufficient or incorrect (for example, wrong addresses and telephone numbers).

Feedback from students was generally very positive about the

program. Many students indicated that they felt fortunate to be a part of the program. Observation of their classroom behavior showed that they were, for the most part, hardworking, self-disciplined, and highly motivated. Most seemed to take their work seriously and wanted to do well. Attendance was high. A major complaint was that class began too early, as many had to travel a long distance to school.

The workshop component of the program was perceived as highly successful. Observations showed that students were participating actively and appeared to be really enjoying the activities. Most workshop teachers showed initiative in their selection of activities. There was, however, variation, with some teachers showing more imagination and creativity in their use and selection of materials. Besides mathematical and verbal games and puzzles, activities sometimes included photography, a class paper, or combining mathematics and art. Workshop teachers were not apprised of the students' pretest achievement scores. This information could have been used in programming. The distribution of calculators was spotty in mathematics workshops.

In general, materials acquisition and distribution was the weakest component of the program. Great variation was perceived in the amount and type of materials used from classroom to classroom. Some classes had a wealth of materials, while others were lacking in them. There were very apparent differences among teachers in initiative in securing or preparing materials. In many cases, delivery of materials was delayed too long. Sometimes sets were not complete. A number of reading teachers complained that the selection of paperbacks for supplementary reading needed

revision with more titles included which had relevance to students' experience.

The bilingual component worked well. The teachers were hard-working and dedicated. The students responded well to their teachers. A reading achievement test in English might not be the best choice. The variation in language ability would be prejudicial to a number of students in measuring their reading skill.

In reference to the criterion referenced test used at Walton High school, some teachers voiced their unhappiness about the strict criterion for mastery (three out of three correct). It was indicated by some mathematics teachers that the strict criterion for mastery did not allow for possible careless arithmetic errors which did not reflect on comprehension of a concept. They suggested that perhaps two out of three or three out of four might be a better criterion.

A number of other important points should be mentioned. Class size was manageable in most cases (less than twenty). Communication among teachers between schools was lacking. The College Bound central staff showed excellent cooperation and involvement with personnel at the six high schools. They were responsive to their questions and needs. They also acted well on the feedback provided by the evaluator during operation of the program, seeking to incorporate suggestions of the evaluator on improving procedure. Finally, it is regretted that budget restrictions reduced the allocation of money for snacks.

Dr. Southworth, in his evaluation of last year's summer program, made the following recommendations: a greater recognition should be given to the wide variance that exists among students

who have the same level of academic achievement according to standardized tests, and individualized instruction and differentiated assignments for these students were effective and should be continued with a greater emphasis on individual differences. These recommendations were implemented effectively in the program this summer. Achievement tests and criterion referenced tests were used as diagnostic instruments. Individualized instruction was employed to concentrate on individual needs and, thereby, strengthen academic weaknesses.

Finally, it should be mentioned that the program was successful in serving the needs of the specific target population for which it was designed, students functioning below grade level in reading and mathematics and linguistically isolated students. Also, other district programs did not cross-reference to or have impact on this program. The physical facilities were adequate for conducting the program.

Chapter IV: SUMMARY OF MAJOR FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

A. Major Findings and Conclusions

1. The 9th grade, 10th grade, and bilingual students showed a highly statistically significant difference between pretest and posttest mean reading and mathematics achievement scores in the positive direction. It can be concluded, therefore, that the program was successful in producing significant gains in reading and mathematics for all groups of participants in the program.
2. At least 70 percent of both the 9th and 10th grade

students at Walton High School demonstrated mastery of at least one instructional objective, in reading and mathematics, that they failed to master before exposure to instruction. Also, the extent of mastery in both reading and mathematics evidenced by students after instruction was substantially greater than that evidenced before instruction. It can, therefore, be concluded that the program was responsible for helping students master a significant number of instructional objectives in both reading and mathematics.

3. Because of the minimum departure found, it can be concluded that the program, as actually carried out, coincided well with the project proposal.

B. Recommendations

1. The system of acquisition and distribution of materials needs reorganization. It is urged that the budget be passed as soon as possible to expedite the ordering process. Greater advanced preparation is needed so that all teachers will have all the materials they need on the first day of the program. Sets of materials should be complete. It should be made clear to teachers that they cannot depend totally on College Bound central staff to supply all materials needed. It is imperative that teachers take the initiative in bringing with them and/or making some of their own materials. It is suggested that the College

Bound coordinator, if possible, make arrangements with principals for access by College Bound teachers to as much material as possible that is used during the regular school year.

2. It is recommended that two or three inexpensive calculators be provided for each mathematics workshop class. These are useful devices that teach as well as being enjoyable to operate.
3. It is highly recommended that two of the most valuable components of the program, individualized instruction and activities workshops, be a part of next summer's program.
4. In relation to bilingual students, a reading achievement test should be selected which would not handicap individuals who are having appreciable difficulty using the English language.
5. The selection of paperbacks used as supplementary reading needs revision. More popular titles and more books relating to students' experience should be included. The purpose of these books is the motivation of the student to read and derive pleasure from reading. Books that are relevant and intrinsically enjoyable to read should have principal consideration when the reading list is prepared.
6. It is recommended that a greater monetary allocation for snacks be made. Considering the probable breakfast that many students consume and the

energy needs for a morning of solid work, a substantial snack halfway through the morning would be of great benefit to the student and would have a definite educational value. It is also recommended that an effort be made to provide a lunch for students through College Bound or through some other source, such as a private company or community organization. Some schools had this lunch program. It is hoped it will be expanded.

7. It is recommended that workshop teachers be apprised of students' pretest scores so that they may be able to arrange activities for a student which would shore up particular weaknesses in mathematics or reading.

8. The College Bound Summer Program should be refunded for next summer. This program succeeded in achieving all its objectives this summer. It produced significant gains in reading and mathematics skills for all groups of participating students. Besides direct educational gains, the program produced other benefits for students. Students were given the opportunity to interact with other students; friendships were undoubtedly made, and students had close contact with a teacher in a warm, non-threatening atmosphere. Students engaged in useful and productive activity during the summer. Their abilities and talents could be brought out and enhanced. With

academic success, students' self-image was assuredly improved. The prospect of getting into and staying in College was a strong motivating factor which would also improve student self-image and show them that they could make a difference in their lives.

C. Suggestions for Improving the Project

1. It is suggested that an attempt be made to recruit educational assistants from the ranks of College Bound graduates. These individuals would be enthusiastic about the program and provide an example of success to students.
2. Teachers might be given, if budget allows, an extra one half to one hour each day to engage in preparation of materials, conferences among themselves, and meetings with the teacher-in-charge or the guidance counselor.
3. It is suggested that a librarian be included among personnel, or trips to the library be scheduled, so that skills in the use of reference materials might be enhanced.
4. A degree of flexibility could be inserted into programming the number of reading and mathematics classes a student takes so that a student who may be stronger in one area could have extra work in the weaker skill.
5. Teachers should be encouraged to supply imput regularly to College Bound central staff concerning

ways in which the program could be improved. Teachers have first-hand knowledge of problems in dealing with students and could be a valuable source of innovative ideas for useful changes in procedure. A mechanism might be set up to facilitate and centralize the gathering of recommendations and suggestions from teachers.

6. It is hoped that the program could be expanded, thus providing as many students as possible with exposure to benefits of the program.
7. It is suggested that a conference be planned for the middle or end of the program which would allow teachers and other staff to share ideas, innovations, and solutions to problems, while they were still fresh in their minds, that might be applied to the program.

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Urban and Community Programs Evaluation
Albany, New York 12234

MAILED INFORMATION REPORT FOR CATEGORICALLY AIDED EDUCATION PROJECTS

SECTION III

1974-75 School Year

Due Date: July 15, 1975

SED Project Number | | | | | | | | | | | |

BE Function Number (N.Y.C. only) | 0 | 9 | 6 | 1 | 6 | 2 | 2 |

Project Title COLLEGE BOUND PROGRAM Summer 1975

School District Name _____

School District Address _____

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Name and Title of Person Completing this form:

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Title Consultant-Evaluator

Telephone Number 212 (Area Code) 673-1748

Date this form was completed 9 / 23 / 75

Use Table 28 for norm referenced achievement data not applicable to Table 26. (See "Instructions" Item 5 before completing this table.)

28. Standardized Test Results

In the table below, enter the requested assessment information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. Before completing this form, read all footnotes. Attach additional sheets if necessary. [27]

Component Code	Activity Code	Test Used 1/	Form Pre	Form Post	Level Pre	Level Post	Total N 2/	Group ID 3/	Number Tested 4/ N	Number Tested 5/	Pretest Date	Pretest Mean	Pretest SD 6/	Posttest Date	Posttest Mean	Posttest SD 6/	Statistical Data Test 7/	Statistical Data Value 8/	Subgroup 9/
60815	720	CAT			Jr. Hi.	Jr. Hi.	746	Grd. 9	684	6	7-1-75	40.89	9.63	8-6-75	46.85	10.84	t	22.75	
60816	720	CAT			Jr. Hi.	Jr. Hi.	229	Grd. 10	208	6	7-1-75	44.87	10.75	8-6-75	50.06	8.66	t	9.67	
60915	720	CAT			4	4	746	Grd. 9	696	6	7-1-75	23.04	7.56	8-6-75	29.67	9.94	t	26.76	
60916	720	CAT			4	4	229	Grd. 10	205	6	7-1-75	26.94	8.57	8-6-75	33.45	9.67	t	14.69	
							ESL STUDENTS BELOW												
60815	720	CAT			Jr. Hi.	Jr. Hi.	82	Grd. 9	76	6	7-1-75	28.71	8.94	8-6-75	34.19	8.88	t	7.93	
60915	720	CAT			4	4	82	Grd. 9	81	6	7-1-75	20.56	9.05	8-6-75	27.64	10.31	t	11.06	

1/ Identify test used and year of publication (MAT-58; CAT-70, etc.)

2/ Total number of participants in the activity.

3/ Identify the participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code.

4/ Total number of participants included in the pre and posttest calculations.

5/ 1 = grade equivalent; 2 = percentile rank; 3 = z score; 4 = Standard score (publisher's); 5 = stanine; 6 = raw score; 7 = other.

6/ SD = Standard Deviation

7/ Test statistics (e.g., t; F; X^2).

8/ Obtained value

9/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

20. Criterion Referenced Test Results: In the table below, enter the requested information about criterion referenced test results used to evaluate the effectiveness of short treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp.2-4 of the instruction manual. Provide only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use additional sheets if necessary. Record in columns 2, 3 and 4 only those participants who completed both tests.

Code	Instructional Objective	Publisher SRA SRA CODE	Level	Component Code 1/	Subgroup 2/	Pretest No. of Pupils Passing (1)	Pretest No. of Pupils Failing (2)	Posttest No. of Pupils from Col. 2 Passing	Posttest No. of Pupils from Col. 2 Failing
2205	Syllables	WA17	Grade 9	60815		27	94	20	74
2305	Word Meaning	V7	"	"		17	104	24	80
2203	Endings	V17	"	"		38	83	22	61
2305	Word Meaning	C6	"	"		96	25	15	10
2305	Word Meaning	C8	"	"		98	23	13	10
2404	Facts and Details	C21	"	"		75	46	20	26
2406	Main Ideas	C22	"	"		18	103	21	82
2404	Facts and Details	C24	"	"		27	94	26	68
2409	Sequence	C25	"	"		42	79	18	61
2403/2406	Inferences/Main Ideas	C27	"	"		13	108	6	102
2403	Inferences	C29	"	"		24	97	27	70
2403	Cause or Effect	C78	"	"		12	109	13	96
2403	Cause or Effect	C87	"	"		37	84	25	59
2504	Selection of Information from Sources	C88	"	"		6	115	5	110
2502	Aids: Visual, Tabular	SS34	"	"		49	72	21	51

1/ Indicate the component code used in previous sections of this report used to describe treatment and population.

2/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), Bilingual code as B) and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

30. Criterion Referenced Test Results: In the table below, enter the requested information about criterion referenced test results used to evaluate the effectiveness of short treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp.2-4 of the instruction manual. Provide only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use additional sheets if necessary. Record in columns 2, 3 and 4 only those participants who completed both tests.

Code	Instructional Objective	Publisher SRA SRA CODE	Level	Component Code 1/	Subgroup 2/	Pretest No. of Pupils Passing (1)	Pretest No. of Pupils Failing (2)	Posttest No. of Pupils from Col. 2 Passing	Posttest No. of Pupils from Col. 2 Failing
1102/1107	Whole Nos./Addition	W31	Grade 9	60915		94	26	23	3
1102/1108	Whole Nos./Subtraction	W37	"	"		74	46	34	12
1102/1109	Whole Nos./Mult.	W44	"	"		85	35	25	10
1102/1110	Whole Nos./Division	W55	"	"		41	79	39	40
1103/1107	Fractions/Addition	F27	"	"		34	86	56	30
1103/1107	Fractions/Addition	F29	"	"		32	88	57	31
1103/1108	Fractions/Subtraction	F33	"	"		21	99	57	42
1103/1109	Fractions/Mult.	F37	"	"		24	96	46	50
1103/1110	Fractions/Division	F39	"	"		31	89	44	45
1104/1107	Decimals/Addition	F41	"	"		51	69	39	30
1104/1109	Decimals/Mult.	F46	"	"		7	113	51	62
1104/1110	Decimals/Division	F48	"	"		11	109	35	74
1111	Properties of Operations & Relations	F50	"	"		19	101	34	67
1111	Properties of Operations & Relations	F55	"	"		3	117	23	94
1902	Solution of Problems	F75	"	"		4	116	9	107

1/ Indicate the component code used in previous sections of this report used to describe treatment and population.

2/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), Bilingual code as B) and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

30. Criterion Referenced Test Results: In the table below, enter the requested information about criterion referenced test results used to evaluate the effectiveness of short treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp.2-4 of the instruction manual. Provide only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use additional sheets if necessary. Record in columns 2, 3 and 4 only those participants who completed both tests.

Code	Instructional Objective	Publisher SRA SRA CODE	Level	Component Code 1/	Subgroup 2/	Pretest No. of Pupils Passing (1)	Pretest No. of Pupils Failing (2)	Posttest No. of Pupils from Col. 2 Passing	Posttest No. of Pupils from Col. 2 Failing
2205	Syllables	WA17	Grade 10	60816		5	21	4	17
2305	Word Meaning	V7	"	"		2	24	4	20
2203	Endings	V17	"	"		10	16	7	9
2305	Word Meaning	C6	"	"		21	5	2	3
2305	Word Meaning	C8	"	"		25	1	0	1
2404	Facts and Details	C21	"	"		20	6	0	6
2406	Main Ideas	C22	"	"		6	20	6	14
2404	Facts and Details	C24	"	"		8	18	6	12
2409	Sequence	C25	"	"		10	16	7	9
2403/2406	Inference/Main Ideas	C27	"	"		3	23	3	20
2403	Inferences	C29	"	"		9	17	8	9
2403	Cause or Effect	C78	"	"		2	24	3	21
2403	Cause or Effect	C87	"	"		14	12	5	7
2504	Selection of Information from Sources	C88	"	"		0	26	2	24
2502	Aids: Visual, Tabular	SS34	"	"		17	9	5	4

1/ Indicate the component code used in previous sections of this report used to describe treatment and population.

2/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), Bilingual code as B) and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

30. Criterion Referenced Test Results: In the table below, enter the requested information about criterion referenced test results used to evaluate the effectiveness of short treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp.2-4 of the instruction manual. Provide only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use additional sheets if necessary. Record in columns 2, 3 and 4 only those participants who completed both tests.

Code	Instructional Objective	Publisher SRA SRA CODE	Level	Component Code 1/	Subgroup 2/	Pretest No. of Pupils Passing (1)	Pretest No. of Pupils Failing (2)	Posttest No. of Pupils from Col. 2 Passing	Posttest No. of Pupils from Col. 2 Failing
1102/1107	Whole Nos./Addition	W31	Grade 10	60916		20	5	5	0
1102/1108	Whole Nos./Subtraction	W37	"	"		20	5	5	0
1102/1109	Whole Nos./Mult.	W44	"	"		22	3	3	0
1102/1110	Whole Nos./Division	W55	"	"		9	16	10	6
1103/1107	Fractions/Addition	F27	"	"		6	19	17	2
1103/1107	Fractions/Addition	F29	"	"		8	17	16	1
1103/1108	Fractions/Subtraction	F33	"	"		2	23	14	9
1103/1109	Fractions/Mult.	F37	"	"		2	23	18	5
1103/1110	Fractions/Division	F39	"	"		10	15	11	4
1104/1107	Decimals/Addition	F41	"	"		15	10	6	4
1104/1109	Decimals/Mult.	F46	"	"		2	23	11	12
1104/1110	Decimals/Division	F48	"	"		12	13	4	9
1111	Properties of Operations & Relations	F50	"	"		4	21	12	9
1111	Properties of Operations & Relations	F55	"	"		0	25	8	17
1902	Solution of Problems	F75	"	"		1	24	3	21

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1/ Indicate the component code used in previous sections of this report used to describe treatment and population.

2/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), Bilingual code as B) and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

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32. Program Abstract: Please provide an abstract of your project, including aspects of the project which account for highly positive results. Provide a summary of the findings in relation to the objectives, as well as a description of the pedagogical methodology employed.

33. Date activities began 7 / 1 / 75 (Mo. Day Yr.) Date activities will terminate 8 / 11/ 75 (Mo. Day Yr.)

34. Project time span (check one): 1[ ] School Year 2[X] Summer 3[ ] 12 Mos. 4[ ] More than 1 year

35. Project is: 1[ ] New 2[X] Resubmitted 3[ ] Continuation (Title III only)

A. If project is resubmitted, please indicate number of years operated:

[ ] 2 years [ ] 4 years

[ ] 3 years [X] 5 or more years

PROGRAM ABSTRACT

The College Bound Summer Program was designed to help educationally disadvantaged and linguistically isolated 9th and 10th grade students improve skills in reading and mathematics. Students were exposed to three hours of instruction, five days a week, for six weeks. Each day's instruction consisted of a remedial or corrective reading class, a corrective mathematics class, and a reading or mathematics workshop. Individualized instruction, with the use of a pretest achievement or criterion referenced test as a diagnostic instrument, was the principal instructional method. An ESL program, utilizing the audio-lingual approach, was included.

The major findings of the program evaluation were these:

1. The 9th and 10th grade and bilingual students showed highly statistically significant gains in both reading and mathematics achievement.
2. The 9th and 10th grade students who were administered a criterion referenced test showed considerably greater mastery of instructional objectives in reading and mathematics after instruction compared to their performance before instruction.
3. The program, as actually carried out, coincided well with the project proposal.

The positive results of the program can be attributed to the following factors: the use of individualized instruction as the chief teaching method, the use of diagnostic techniques to ferret out skills that needed strengthening, the high quality of the College Bound staff, the highly motivated and self-disciplined students, and the appropriately and carefully structured individual components of the project, such as the workshops and ESL program.